VIRGINIA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR MANAGEMENT AND DISPOSAL OF CONTAMINATED SOIL RELOCATED FLEETREC PARK

March 23, 2007

I. DESCRIPTION

The Contractor is advised that the construction site is currently being regulated by the US Environmental Protection Agency (USEPA) under the federal Comprehensive Environmental Response Compensation and Liability Act (CERCLA, a.k.a. "Superfund") and is a National Priorities List (NPL) site. Large portions of the construction site consist of two areas that have undergone remediation and closure: the Camp Allen Salvage Yard (CASY) and the Camp Allen Landfill (CALF). The CASY comprises the largest portion of the construction site and is covered with a minimum of 12 inches of clean soil (i.e. "engineered soil cover"). The closure of the both the CASY and the CALF left contamination in place above established cleanup criteria in those areas depicted in white (CASY) or brown (CALF) as shown in Attachment 1 [Figures 1 and 2]. Potential contaminants include: pesticides, poly-chlorinated biphenyls (PCBs), heavy metals, volatile organic compounds (VOCs) and/or semi-volatile organic compounds (SVOC). Studies performed by VDOT have shown that none of the contaminated soil to be excavated for installation of project utilities or building foundations would be classified as a Hazardous Waste under the Resource Conservation and Recovery Act (RCRA). Those areas depicted in green (CASY) were determined by the Navy to contain no significant contamination (hereinafter described as uncontaminated) to a depth of 5 feet below existing grade. Contractor is advised to review the Soils Pre-Characterization Report for Fleet Rec Park (August 2005) to understand the extent and characteristics of existing contaminated soils.

This work shall consist of the management and/or disposal of both contaminated and uncontaminated soils. These activities are associated with the installation of utilities, building foundations, light poles and other subsurface features for the construction of Fleetrec Park.

The Contractor shall comply with the following documents (which are hereinafter incorporated by reference): (1) Special Provisions for the Navy License Agreement Requirements; and (2) Technical Memorandum Construction Restrictions for Navy Property, February 25, 2002 (hereinafter referred to as the Construction Memorandum and included as Attachment 1 in the Special Provision for Management of Contaminated Groundwater; Relocated Fleetrec Park) except the following items under Section 7.3: Site Characterization, Groundwater Modeling, and Construction Restrictions (except as it pertains to stormwater runoff). The requirements contained in this special provision are supplementary to the requirements contained in these aforementioned two documents. The figures and appendicies referenced in the Construction Memorandum and the Dewatering Memorandum will be available in electronic format at the VDOT Hampton Roads District Environmental Section.

II. PROCEDURES

IIA Pre-Construction Activities

IIA(1) Sequence of Construction

No later than five days prior to the Pre-Construction Meeting, the Contractor shall provide the VDOT Area Construction Engineer a sequence of construction (to include a timeline) for activities that will disturb the cover on the CALF and CASY. Contractor is hereby advised that delays up to 7 days may be encountered in any one area due to the discovery of unforeseen contamination and shall accommodate such delays into the construction sequencing; Contractor will be allowed to work in other areas of the project.

IIA(2) Contamination Grid Survey

Contractor shall survey and stake to establish areas of contaminated soil and uncontaminated soils (as depicted in Figures 1 and 2) that will be disturbed through construction activities as described in Section IIB(2).

IIA(3) Health and Safety Plan

The Contractor shall prepare a single comprehensive Health and Safety Plan (HASP) for all contract personnel, in accordance with the Construction Memorandum. At a minimum, the HASP shall address OSHA requirements under 29 CFR 1910.120 and any other applicable OSHA standards. It should be noted that one HASP should be written for the site activities to include both soils (addressed herein) and groundwater (see Special Provision for the Management of Groundwater).

A copy of the Navy HASP that was prepared for the CASY remediation project is provided as Attachment 3 in the *Special Provision for Management of Contaminated Groundwater*, Relocated Fleetrec Park for reference only. The Contractor shall submit the HASP to VDOT and the Navy at least 14 days prior to conducting work on the project and address any comments as necessary prior to initiating work. Two copies of the HASP should be submitted to the Navy Site Manager (see attached contact list). Four copies should also be submitted to the VDOT Norfolk Residency, Attention Mr. Bill Collier, Jr., Resident Administrator, 1992 South Military Highway, Chesapeake, VA 23327.

IIA(4) Pre-characterization of Borrow Materials

In accordance with the Construction Memorandum, the Contractor shall pre-characterize the source of any soils brought on site (e.g. borrow, clay, sands, topsoil – hereinafter referred to collectively as "borrow") to determine the presence of potential contaminants. The Contractor shall ensure that the testing parameters include those listed on Table 1 and no borrow may be used on the project where the concentrations of the borrow exceed the Table 1 maximum concentration criteria. This characterization is in addition to, not in lieu of, compliance with Section 106.03(c) of the VDOT Road and Bridge Specifications. The Contractor shall develop a Field Sampling and Laboratory Testing Plan for Soils and Groundwater (Sampling Plan) as required by the Construction Memorandum, page 14 prior to testing the borrow sources and submit the plan to the Navy Site Manager and VDOT for approval at least 14 days prior to any borrow characterization activities. The Contractor shall collect composite samples from each borrow source according to the following:

Topsoil	1 composite sample for every 3500 cubic yards (CY) with a minimum of 4 composite samples for each borrow source of less than 14,000 CY.
	Each composite sample shall be comprised of 4 equal-spaced sub-samples
All sources other than topsoil	1 composite sample for every 7,000 cubic yards (CY) with a minimum of 4 composite samples for each borrow source of less than 28,000 CY.
	Each composite sample shall be comprised of 4 equal-spaced sub-samples

Table 1.	
Constituent	Maximum Concentration
Total PCBs	2 PPM
Total Antimony	41 PPM
Total Arsenic	28 PPM
Total Iron	31,100 PPM
Total Lead	400 PPM
TCLP Arsenic	5.0 MG/L
TCLP Barium	100.0 MG/L
TCLP Benzene	0.5 MG/L
TCLP Cadmium	1.0 MG/L
TCLP	0.5 MG/L
Carbon Tetrachloride	,
TCLP Chlordane	0.03 MG/L
TCLP Chlorobenzene	100.0 MG/L
TCLP Chloroform	6.0 MG/L
TCLP Chromium	5.0 MG/L
TCLP O-Cresol, M-Cresol, P-Cresol	200.0 MG/L
TCLP Total Cresol	200.0 MG/L
TCLP 2,4-D	10.0 MG/L
TCLP 1,4-Dichlorobenzene	7.5 MG/L
TCLP 1,2-Dichloroethane	0.5 MG/L
TCLP 1,1-Dichloroethylene	0.7 MG/L
TCLP 2,4-Dinitrotoluene	0.13 MG/L
TCLP Endrin	0.02 MG/L
	0.008 MG/L
TCLP Heptachlor	0.13 MG/L
TCLP Hexachlorobenzene	0.5 MG/L
TCLP Hexabutadiene	3.0 MG/L
TCLP Hexachloroethane	5.0 MG/L
TCLP Lead	0.4 MG/L
TCLP Lindane	0.4 MG/L 0.2 MG/L
TCLP Mercury	10.0 MG/L
TCLP Methoxychlor	200.0 MG/L
TCLP Methyl Ethyl Ketone 2 But an one	2.0 MG/L
TCLP Nitrobenzene	100.0 MG/L
TCLP Pentachlorophenol	
TCLP Pyridine	5.0 MG/L
TCLP Selenium	1.0 MG/L
TCLP Silver	5.0 MG/L
TCLP Tetrachloroethylene	0.7 MG/L
TCLP Toxaphene	0.5 MG/L
TCLP Trichloroethylene	0.5 MG/L
TCLP	400.0 MG/L
2,4,5- Trichlorophenol	0.0110#
TCLP	2.0 MG/L
2,4,6-Trichlorophenol	
TCLP 2,4,5-TP (Silvex)	1.0 MG/L
TCLP Vinyl Chloride	0.2 MG/L
Ignitability	Flashpoint <140 degrees F
Reactivity	classification as reactive
Corrosivity	pH < or = 2.0 or > or = 12.5
Total BTEX (benzene, toluene, ethylbenzene, xylene)	10 PPM
TPH DRO/GRO (diesel & gasoline range organics)	50 PPM
TOX	100 PPM

IIB Construction Activities

IIB(1) Pre-Excavation Notifications

The Contractor shall notify the VDOT Environmental Site Manager and VDOT (see attached contact sheet) no less than 72 hours prior to initiating earth work activity, to allow VDOT to monitor the excavation operations. Separate notifications shall be made for each subcontractor performing earthwork activity. The Contractor shall provide an additional notification to VDOT no less 24 hours prior to: (1) excavating greater than five (5) feet below existing ground surface; (2) sewer line excavation in the CALF; and (3) driving piles for sports lighting.

The Contractor shall also notify the NAVY Site Manager and VDOT 20 days prior to establishing any waste accumulation/storage area and comply with any applicable NAVY waste storage requirements in Attachment 2.

IIB(2) Soil Excavation and Management

IIB(2)a. Excavation and Material Handling Plan

Prior to initiating soil excavation activities, the Contractor shall develop an Excavation and Material Handling Plan as required by the Construction Memorandum (page 14) and submit two copies to the NAVY Site Manager and four copies to the VDOT Norfolk Resident Administrator. No excavation shall be performed prior to approval of the Excavation and Material Handling Plan by the Navy.

IIB(2)b. Management of Excavated Soils

The Contractor shall re-use certain soils as backfill during the installation of utilities and any building foundation excavations that penetrate the 1-foot cover. Soils the Contractor shall re-deposit as backfill include:

Unsaturated Soils outside the CASY and CALF (gray areas)
Top 1-foot cover on CASY
CASY "green" soils less than 5-feet below existing ground surface

Any soils to be re-deposited as backfill shall be staged adjacent to the point of excavation and be re-deposited immediately following the completion of utility installation.

Any top one-foot cover soil from the CASY that is to be re-used as backfill, shall be redeposited in the lowest elevation of the excavation.

The Contractor shall not re-deposit the following soils:

\sqcup	CAST Write soils
	CASY "green" soils deeper than 5 feet below existing ground surface
	All saturated soils
	CALF soils
	Soils generated from installation of backstop fencing, dugout bench foundations

The Contractor shall directly load all soils destined for off-site disposal into appropriate transfer container or trucks. Contractor shall directly load all saturated soils into leak-proof containers. Wet soils will not be allowed to be dewatered or dried on-site.

All soils not approved for re-deposition have been pre-classified as solid waste. The Contractor is responsible for the management transport and disposal of these wastes to a Navy-approved solid waste disposal facility.

Contractor shall remove all soils destined for disposal from the site as soon as possible following excavation. Contractor shall perform weekly inspections of all soils staged in any waste accumulation/storage area. The Contractor shall record all inspections in a log that is to be provided to VDOT and the NAVY upon request and shall at a minimum include: name of person conducting the inspection; date and time of inspection; number of containers and contents; condition of containers/observations; and date and time of repairs or remedial actions.

The Contractor shall coordinate with the VDOT Environmental Site Manager to properly manifest any soils taken off-site for disposal. The Contractor shall provide the VDOT Environmental Site Manager and VDOT with copies of the manifests and/or bills of lading signed by the Navy Site Manager and the disposal facility and weigh tickets or other disposal documentation. The volume of excavated soil destined for off-site disposal is estimated at 2485 cubic yards.

If an area of Unforeseen Contamination is encountered during excavation activities, the Contractor will contact the Navy Site manager and VDOT. The Contractor shall follow the procedures outlined in the Special Provision for the Navy License Agreement Requirements as approved by the VDOT Engineer.

The Contractor shall use imported clean fill to establish existing grade in the "White Areas".

IIB(3) Existing Cover Restoration

The Contractor shall restore the existing soil cover in the CASY and CALF where it is cut or otherwise significantly disturbed prior to importing fill material to establish final grades for the project. The Contractor shall restore all areas for such deep excavations to existing grade or slightly higher elevation using certified clean material. Deep rutting is considered a disturbance of the existing cover. The Contractor shall confirm such restoration activities through a Restoration Survey and shall comply with the technical requirements outlined in the Special Provision for the Navy License Agreement Requirements. The Contractor shall not perform any additional excavation or filling operations on any areas that are part of the restoration survey until the survey is approved. Site work may precede in other areas on the Premise including the Camp Allen Landfill, areas outside of the CASY and Camp Allen Landfill. The contractor shall submit the Restoration Survey to VDOT for subsequent submission to the Navy for approval and shall allow 30 days for approval of the survey

III. MEASUREMENT AND PAYMENT

All imported borrow and uncontaminated soil backfill costs, including management activities, will be included in the cost for 'Earthwork'. There will be no separate pay item for these materials.

Management and Disposal of Excess Soil – Non Hazardous Waste will be paid for in units of tons of soil disposed as solid waste and as verified by the signed manifests or disposal receipts. Payment shall be full compensation for handling, management, temporary storage (if needed), transportation, disposal, documentation, and other costs, and any required permitting fees.

Restoration Survey will be paid as full compensation for all labor and materials to complete the restoration survey.

Survey and Stake Soil Characterization Grid will be paid as full compensation for all labor and materials to complete the survey and field delineation activities.

Environmental/Health and Safety Plan Submittals will be paid as full compensation for all labor and materials to complete the Health and Safety Plan; Soil and Groundwater Testing Plan; and the Materials Handling Plan.

Environmental Testing of Imported Soils (e.g. borrow, clay, sands, topsoil) will include all labor, equipment and materials necessary to complete the sampling, testing and reporting for all sources of imported borrow and will be paid on a Lump Sum basis.

Payment will be made under:

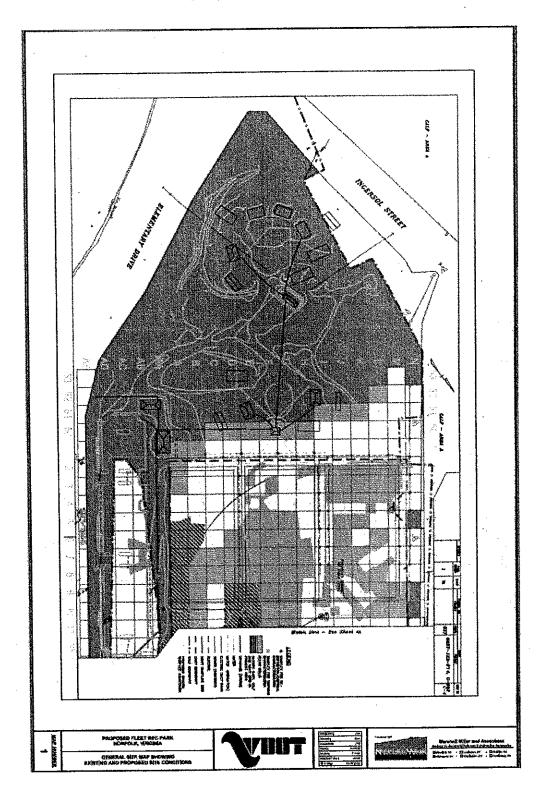
Pay Item	PAY UNIT
Management and Disposal of Excess Soil - Non-	Ton
Hazardous Waste	
Survey and Stake Soil Characterization Grid	Lump Sum
Restoration Survey	Lump Sum
Environmental Testing of Imported Soils	Lump Sum
Environmental/Health and Safety Plan Submittals	Lump Sum

CONTACT LIST

Navy Site Manager –Resident Office in Charge of Construction – (757) 322-4480 VDOT – Michael Sarros – (757) 925-1648 (Hampton Roads District Environmental) VDEQ – Milt Johnston – (757) 518-2151 (Tidewater Regional Office)

NAVY approved vendor list: http://www.drms.dla.mil/environmental/qualfac.pdf
And http://www.drms.dla.mil/environmental/Qualtran.pdf

ATTACHMENT 1 [Figures 1 and 2]
ATTACHMENT 2 Navy Waste Management Procedures/



ORDER NO.: G25
CONTRACT ID. NO.: C00061322C02

